

VIII. MILESTONES

Goal A: For at least the next 5 years, continue and enhance statewide water quality assessment processes to evaluate water quality and prioritize watersheds affected by nonpoint source (NPS) pollution.

Objective 1

Periodically assess and prioritize watersheds in need of restoration due to NPS pollution based on available methodologies.

Lead Agency(ies): Clean Water Commission, DNR, NRCS

Projected Completion: Ongoing – every 2-3 years

Status:

Objective 2

Continue to improve water quality monitoring methods used to assess NPS pollution.

Lead Agency(ies): DNR

Projected Completion: Ongoing

Status:

Objective 3

By 2001, develop and propose to the Clean Water Commission numeric biological criteria, as a water quality standard, to better identify those impacted wadable streams incapable of supporting the expected biological community.

Lead Agency(ies): DNR

Projected Completion: December 2001

Status:

Objective 4

Publish a report of water quality assessment efforts using improved methodologies by 2005.

Lead Agency(ies): DNR

Projected Completion: December 2005

Status:

Objective 5

Coordinate with USEPA to develop nutrient criteria and propose those criteria as water quality standards by 2003.

Lead Agency(ies): DNR

Projected Completion: December 2003

Status:

Goal A: Objective Performance Measures

	2000	2001	2002	2003	2004
Production of 303(d) list					
Production of 305(b) report					
Updated Unified Watershed Assessment					
Establishment of biocriteria as water quality standards					
Establishment of nutrient criteria as water quality standards					
Number of TMDL studies completed					
Number of watersheds with ambient monitoring					
Number of watersheds with biological and habitat assessment					
Number of ambient monitoring sites by ecoregion					
Number of sites with biological and habitat assessment by ecoregion					
Number of watersheds with ambient, biological, and habitat assessments					
Number of watershed water quality models of NPS pollutants developed					

Goal A: Implementation Strategies	Participating Agency(ies)	Status
Coordinate with NPS partners to develop biocriteria and nutrient criteria	DNR MDC UOE	
Continue statewide monitoring of aquatic flora and fauna	DNR MDC	
Conduct special studies of habitat and fish communities	DNR MDC	
Conduct fish tissue sampling	MDC DOH	
Collect, manage and disseminate quality assured water quality data	DNR DOA MDC UOE	
Support training of volunteers	DNR MDC UOE NRCS	
Continue monitoring on the Missouri and Mississippi Rivers	MDC	
Review available data and watershed priorities	DNR DOA MDC NRCS	
Review existing water quality standards every 3 years	DNR MDC	
Develop a watershed prioritization tool useful at the 14-digit HUC level of detail	DNR MDC NRCS	
Continue to develop aquatic macroinvertebrate biocriteria	DNR MDC	
Maintain the level of effort and cooperation achieved for water quality monitoring and water quality data management at or above FY 2000 levels.	DNR DOA	

Participate in USEPA Region 7 nutrient criteria workgroup	DNR MDC NRCS	
By 2004, complete at least 20 TMDL studies	DNR	
Facilitate the development and use of watershed water quality modeling of NPS pollutants such as contaminated sediments, suspended sediment, pesticides and nutrients	DNR DOA MDC UOE NRCS	

Goal B: Improve water quality by implementing NPS-related projects and other activities.

Objective 1

By 2004, 25% of waters listed on the 1998 303(d) list due to NPS pollution will meet water quality standards.

Lead Agency(ies): DNR and NPS partners

Projected Completion: December 2004

Status:

Objective 2

By 2014, 75% of waters listed on the 1998 303(d) list due to NPS pollution will meet water quality standards.

Lead Agency(ies): DNR and NPS partners

Projected Completion: December 2014

Status:

Objective 3

Reduce potential nonpoint sources of groundwater contamination.

Lead Agency(ies): DNR and NPS partners

Projected Completion: Ongoing

Status:

Objective 4

Cooperate and collaborate with other resource programs, agencies and private partners to prevent, manage, and reduce nonpoint sources of pollution.

Lead Agency(ies): DNR and NPS partners

Projected Completion: Ongoing

Status:

Objective 5

Encourage environmental stewardship through information and education.

Lead Agency(ies): UMC Extension and NPS partners

Projected Completion: Ongoing

Status:

Objective 6

By December 2004, initiate 20 or more locally led watershed projects incorporating water quality protection, restoration, or voluntary TMDL action plans.

Lead Agency(ies): USFS, DNR, NRCS, USFWS, UMC Extension

Projected Completion: December 2004

Status:

Objective 7

By 2009, begin implementing at least 20 locally led voluntary TMDL action plans.

Lead Agency(ies): Contacts for projects initiated in objective 5

Projected Completion: December 2009

Status:

Objective 8

Support pollution prevention efforts to sustain water quality of outstanding state or national resource waters.

Lead Agency(ies): DNR and NPS Partners

Project Completion: On-going

Status:

Objective 9

Support pollution prevention efforts to sustain water quality of those waters that are close to meeting the criteria for being placed on the 303(d) list as impacted by NPS pollutants, but have not yet attained that status.

Lead Agency(ies): DNR and NPS Partners

Project Completion: On-going

Status:

Goal B: Objective Performance Measures

	2000	2001	2002	2003	2004
Number of local or regional watershed alliances formed					
Number of Special Area Land Treatment (SALT) agricultural NPS water quality projects approved by the Soil and Water Commission					
Number of acres treated and best management practices applied as part of watershed projects and voluntary WQMP/TMDL action plans					
Number of watershed projects initiated					
Number of voluntary TMDL action plans implemented					
Number of locally led watershed projects initiated					
Number of locally led voluntary TMDL action plans implemented					
Number of drinking water reservoirs in compliance with NPS-related drinking water standard					
Quantifiable measures on a project-specific basis such as:					
tons of soil saved					
reductions in nutrients and pesticides applied (if appropriate)					
reductions in pesticides and nutrients leaving the field					

Number of nutrient management plans (NMP) implemented at animal feeding operations (AFOs)

Number of acres on which nutrients are applied in accordance with an approved NMP

Number or amount of State Revolving Fund loans used to prevent NPS pollution

Number of stream miles returned to compliance with water quality standards which were included on the 1998 list of impaired waters prepared under Section 303(d) of the federal Clean Water Act as a result of NPS pollution

Number of lake acres returned to compliance with water quality standards which were included on the 1998 list of impaired waters prepared under Section 303(d) of the federal Clean Water Act as a result of NPS pollution

Number of potential nonpoint sources of groundwater contamination controlled

Number of educational and informational activities conducted by government and private entities

Number of participants in educational and informational activities

Number of informational and guidance materials developed and distributed

Number of stream teams and Level I, II, and III volunteer monitoring teams

Number of abandoned wells certified as properly plugged

Number of source water protection plans

Number of acres protected by source water protection plans

Goal B: Implementation Strategies	Participating Agency(ies)	Status
Expand eligible uses of the State Revolving Loan fund programs to include prevention or control of nonpoint sources	DNR DOA	
Designate as top priority for funding assistance those waters included on the 303(d) list as impaired by nonpoint sources	DNR	
Support programs and training that provide communities and local leaders the tools to plan, fund and direct watershed protection and restoration efforts	DNR DOA MDC UOE NRCS	
Encourage and support locally led watershed projects that incorporate water quality protection, restoration, or voluntary TMDL action plans	DNR DOA MDC UOE NRCS	
Direct funding pursuant to section 319 of the Clean Water Act with maximum flexibility to complement resources available to the watershed from other programs and agencies	DNR	
Support development and adoption of innovative best management practices through resource management systems	DNR DOA MDC UOE NRCS	
Sponsor water quality information and education programs and materials	DNR DOA MDC UOE NRCS	
Offer technical assistance and cost share assistance as appropriate	DNR MDC UOE NRCS	

Support water quality, NPS issues training and technical certification processes for advisors to the public in related resource areas	DNR DOA MDC UOE NRCS	
Support activities promoting environmental stewardship in the manipulation of land by the developmental, agricultural and silvicultural communities	DNR DOA MDC UOE NRCS	
Actively seek collaborative NPS water quality protection projects that are likely to provide mutual benefits to participants and sponsors	DNR MDC UOE NRCS	
After revision of the Unified Watershed Assessment to make it a more usable tool, target Category 1 watersheds for voluntary TMDL action plans or WQMP plan implementation	DNR NRCS	
Advise local entities on the appropriate use of urban and suburban stream protection and stormwater sediment control resolutions and ordinances	DNR MDC UOE NRCS	
Promote pollution prevention and protection of waters in projects throughout the state.	DNR MDC UOE NRCS	
By 2004, integrate NPSMP goals and objectives into Phase II of the State Water Plan.	DNR	
Develop watershed restoration and protection strategies for priority areas where water quality is degraded by nonpoint source pollution due to karst topography.	DNR MDC UOE NRCS	

Goal C: Maintain a viable, relevant, and effective NPS Management Program with the flexibility necessary to meet changing environmental conditions and regulations.

Objective 1

Review and update the Nonpoint Source Management Plan (NPSMP) every five years.

Lead Agency(ies): DNR and NPS partners

Projected Completion: December 2004

Status:

Objective 2

Strengthen cooperation and collaboration with other resource programs, agencies and private partners.

Lead Agency(ies): DNR and NPS partners

Projected Completion: Ongoing

Status:

Objective 3

Use appropriate program and financial systems to ensure Section 319 funds are used consistently with legal obligations and environmental benefits are maximized.

Lead Agency(ies): DNR

Projected Completion: Ongoing

Status:

Objective 4

By 2004 identify federal lands and activities that are not managed consistently with state NPS objectives.

Lead Agency(ies): DNR, USFWS

Projected Completion: December 2004

Status:

Objective 5

Maintain funding of NPS activities at or above 1999 levels.

Lead Agency(ies): DNR and NPS partners

Projected Completion:

Status:

Goal C: Objective Performance Measures

	2000	2001	2002	2003	2004
NPSMP is reviewed and updated in accordance with implementation schedule					
Numbers and diversity of participants in the Water Quality Coordinating Committee meetings					
Number and diversity of collaborators in development of NPSMP					
Number of federal lands or activities inconsistent with the NPSMP and the number addressed of those lands or activities addressed					
Status of GRTS reporting					
Number of projects closed out properly					
Number of MOA's signed					
Procedural improvements identified and implemented					
Amount of state funding directed to NPS activities					
Amount of federal funding directed to NPS activities in Missouri					

Goal C: Implementation Strategies	Participating Agency(ies)	Status
Organize and support meetings that provide a forum for sharing water quality and NPS information and technologies, such as the Water Quality Coordinating Committee, Watershed Committee of the Ozarks and others	DNR DOA MDC UOE NRCS	
Work with local authorities and landowners to achieve goals in the state NPSMP	DNR MDC UOE NRCS	
Capitalize on opportunities to provide input regarding NPS issues to other entities	DNR DOA MDC UOE NRCS	
Incorporate NPS-related goals of other groups and agencies in the NPS Management Program as appropriate and provide complementary assistance in achieving those goals	DNR DOA UOE NRCS	
Review and revise the NPSMP according to the following schedule: Annually review and, if appropriate, revise the assessment and monitoring strategy and funding sources in the NPSMP. Year two, review and update the implementation assistance and regulatory authorities. Year three, review and update	DNR MDC	

<p>remaining categorical sections such as land application of permitted wastes.</p> <p>Year four, review and revise goals and objectives and review legal certification of authority. Complete updates of any sections not revised during the preceding five years.</p> <p>Make appropriate revisions to the NPSMP as needed when changes in environmental conditions or regulatory authorities make the existing plan irrelevant or inappropriate</p>		
Use the Water Quality Coordinating Committee and other forums to review, comment, and participate in the NPSMP review and revision	DNR DOA NRCS	
Use the Clean Water Commission and public notice procedures to provide the opportunity for public review and comments to the revised NPSMP	DNR	
Maintain current information on Grant Reporting and Tracking System (GRTS)	DNR	
Periodic audits conducted	DNR	
Follow EPA guidelines in reviewing, prioritizing, funding and managing activities funded under section 319 of the Clean Water Act	DNR	
Suggest improvements to state and federal program guidelines when appropriate to enhance NPS management capabilities	DNR MDC NRCS	

